RETRENCHMENT OF LIPOMATOUS ABDOMINAL WALL COMBINED WITH OPERATION FOR RADICAL CURE OF UMBILICAL HERNIA.

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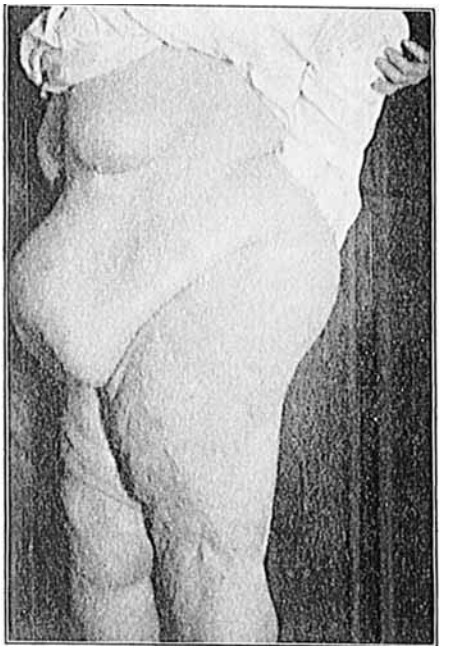
THE patient was a woman of thirty-eight years, married, the mother of two children born respectively in her thirty-second and thirty-fourth years. She has always been very fat, at the age of sixteen weighing 246 pounds; at twenty years of age she weighed 260 pounds, the most she has ever weighed. Her present weight is about 240 pounds. She states that formerly, even when she was fattest, the abdomen was always flat. About one year ago the abdomen began to enlarge, enlargement taking place first straight up towards the breast on the right side above the navel. There was not much pain at first. The swelling of the abdomen gradually increased, with shortness of breath and great pain in the abdomen in front as well as in the back. In the last six months the abdomen has become much more prominent, half again as large as it was before. She had a fall from a wagon in September last, and since then there has been a discharge of a thin, brownish, ill-smelling fluid from the umbilicus. The bowels have been quite regular always, scarcely ever failing to act daily.

Physical Examination.—The pendulous abdomen hangs down like an apron on the thighs, being on a level with the perineum when the patient is in a dorsal position, and a couple of inches lower when in an upright position. In a standing position, the circumferential measurement of the base of the pouch is thirty-four inches; from side to side it is twenty inches, and from above downward, seventeen inches. Percussion shows the intestine close under the skin above the navel over an area five inches wide by two and a half inches vertically. On coughing, a very

pronounced impulse is felt in the contents of the pouch. The patient has observed that the tumor is much larger sometimes than at others. Diagnosis was made of umbilical hernia complicated by a very pendulous abdomen. The contents of the sac could be partially reduced.

In view of the excessive disability and discomfort which the patient suffered, it was determined to perform an operation for the radical cure of the hernia, and at the same time to retrench



Lipomatous abdominal wall.

the pendulous abdomen. The operation was performed on February 7, 1900, in the clinic of the Louisville Medical College, with the assistance of Dr. A. M. Cartledge. A transverse incision about six inches long was made two inches above the umbilicus, which had been previously stuffed with cotton and closed by means of three sutures. The hernial sac was encountered close to the skin, being covered by it and a thin layer of fat. The sac

was readily separated from its surrounding tissues down to its neck. It was then opened, exposing the hernial ring. This ring was about two inches in diameter, exactly in the central line; its borders were sharply marked by a thick fibrous ring which occupied the usual position at the upper part of the umbilicus. On opening the sac, it was found to contain a part of the transverse colon and omentum. The omentum alone was slightly adherent, but was not especially large and fat-containing, and, therefore, was not tied off. The intestine and omentum were easily returned through the ring. The edges of the ring could be readily brought in apposition, and closure was effected by mattress sutures taken from side to side through the base of the ring, closing it from above downward; a half-dozen heavy chromicized catgut sutures were necessary for this purpose. The sac was made up of the peritoneum on the inner side and the abdominal fascia on the outer, these two layers being amalgamated, inseparable, and forming one structure. The sac was then cut off about a half-inch from the margins of the ring, and a second running suture of No. 2 plain catgut was made, bringing the sac stumps together.

The abdominal wall contained a layer of fat from three to four inches thick. The horizontal incision which had first been made was now prolonged in both directions to the two flanks, and a second transverse incision was made about seven inches below the first and joining the ends of the first incision in the two flanks. These two incisions extended through the fat down to the fascia; the enclosed portion of the abdominal wall, amounting to several pounds of skin and fat, was now dissected up and removed in the shape of a wedge. A continuous catgut suture was now applied from side to side apposing the deeper portions of the exposed area. Above this, interrupted and buried catgut sutures were applied in tiers; and, finally, the skin was approximated by silkworm-gut sutures placed at intervals of several inches, and then a plain catgut suture applied in button-hole fashion. After suture the incision measured twenty-two inches in length from flank to flank. The retrenchment of the abdomen was very pronounced, the pendulous appearance being entirely removed and replaced by a simple, large, pronounced ridge.

On February 14 dressings were changed for the first time; primary union had taken place throughout. With the excep-

tion of the first night, when an annoying pain was complained of in the small of the back, the patient had practically no discomfort.

On March 5 the patient was exhibited to the Louisville Surgical Society. The abdomen, although very greatly reduced, was still somewhat pendulous; and it seemed rather a mistake that the retrenchment had not been made more extensive than it was. The hernia at this time gave no indication of recurrence; but, of course, the time is entirely too short to form any estimate of the ultimate success of the operation, in so far as the radical cure of the hernia is concerned.

The resection of the fatty abdominal wall in the way described constitutes a procedure of which I have not been able to find a description, though doubtless it has been done before. It seems to have several points of advantage. The incision down to the deep fascia is at right angles to the line of least resistance of the deep abdominal wall. Its extent gives full and ready access to the hernial sac and ring, and permits unembarrassed closure of the deeper structures. Most of all, perhaps, such resection rids the patient of a ponderous, distressing, and entirely superfluous abdominal pouch. If this case may be taken as an index, there need be no fear of failure, under proper conditions, of prompt union of even such an extensive incision through such a poorly vitalized structure as a fatty cushion of four or five inches.

It is a question for consideration whether or not such resection would be justifiable for the retrenchment of pendulous abdomens unaccompanied by hernia, for the purposes of promoting comfort and removing one, at least, of the causes tending to produce hernia.

The radical cure of umbilical hernia in adults has been so unsatisfactory that most writers still advise that the hernia should be retained by a pad if still reducible, and supported by a suspensory bandage if irreducible, radical cure only being attempted when operation is necessitated by strangulation. The unsatisfactory results are due to the great tension which attends the closure of the ring, it being impossible in many cases to appose at all the fascia constituting the margins of

the ring. The best results have been obtained by splitting longitudinally the inner margins of the sheaths of both rectus muscles and subsequent suture of the abdominal wall in layers, the peritoneum and overlying fascia being first united, then the two recti muscles, then the anterior sheaths of the latter, and, finally, the skin. This is the operation described by Tillmanns It must be remembered, however, that in many cases it will be found impossible to unite the anterior sheaths of the rectus muscles after splitting in the way described, or at least such union would be possible only under great tension, which in all probability would defeat the ultimate success of the procedure.

It will be borne in mind that at the region of the umbilicus the sheath of the rectus muscle is made up in front of the aponeurosis of the external oblique and half of the aponeurosis of the internal, the other half, together with the aponeurosis of the transversalis muscle, forming the sheath posteriorly. It might be found possible to modify the operation detailed above by dividing the anterior sheaths of the rectus muscles vertically an inch or more from the ring borders. The strong fascia obtained in this way would then be turned over across the aperture, the inner sides of the flaps becoming the outer sides as they were sutured in place. The freed recti muscles could then be brought in apposition as before. Closure could be effected in this way without any tension. The wall over the recti muscles would be weakened; but as the rectus has here a posterior sheath, this weakening would not be serious.

[*June 20.*—The patient, writing under recent date, informs us that she is in excellent condition, able to attend to her household duties efficiently and comfortably, there being no evidence of recurrence up to this time.]